

Hanging Out Down at the Pass: Pass Labs INT-60 Integrated Amplifier review

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By John Richardson

I've been doing a lot of thinking and soul searching lately, both regarding my place in this quirky hobby and my written musings on it. Why do I enjoy coming home from a long day's work, and after a short break, running up to my listening room and firing up the system? Why do I look forward to late nights listening intently to new (and old) tunes on new (and familiar) gear? Why do I hanker to excitedly share my thoughts with you about all of this on the (virtual....) written page? Well, it can't be for the money, and since I'm told that time is money, there must be something else going on; some powerful force indeed.

Well, here it is, after much intense mental wandering, forty days and forty nights on the mountain, followed by some final divine communication: are you ready? Really ready? Well... well.... Because it makes me happy and makes me feel good! There it is. That simple.

Why do we pick a lifetime soulmate? Why can't a car enthusiast be totally satisfied with a Toyota Camry, which can transport him in absolute safety and comfort? Why does an amateur horologist gain pleasure from wearing a Rolex or Omega timepiece when his phone tells the time just as well?

Quite simply, if one is an *enthusiast*, it's the sensual pleasure these things and their associated experiences give us that keeps us coming back again and again. These things make us happy in a way that most "regular" folks just can't understand. And that's ok, as it takes all kinds to make the world go 'round.

These musings bring me to the Pass Labs INT-60 integrated amplifier, the subject of this review, a veritable feast for the eyes and ears. Titillating as it may be, it costs a cool nine-grand, a sum which reasonable people like my lifetime soulmate (and wife) would consider stupid money for something as mundane as an audio amplifier.

Oh, but we *enthusiasts* know better, now don't we? I mean, just look at the thing: it's a pure vision of technological beauty, much like a Rolex Submariner or that Gull-wing Mercedes. And it gets better: real happiness comes from satisfying as many of the senses as we can: the feel, smell (did I just catch a whiff of ozone when I turned the amp on?), and yes, the sound. The real purpose of a device like the INT-60 is to bring us and the music closer together, is it not? If such things get me excited, well then I want to tell you about it!

As I've said before, I'm a very analytical person. That's how I think. That's how I do my job (I teach and practice analytical chemistry for a living). I love measurements, especially those made using precision instruments, as that's pretty much what analytical chemists are trained to do. Therefore, if anyone ought to be on the "if it measures well, it ought to sound good" bandwagon, it would be me. But then again, I'm also an audio *enthusiast*, so I've also learned to trust my ears, brain, and emotions over precision measurements. I've come to believe that such measurements really don't have much to do with how I feel about an experience; an experience such as listening to my favorite tunes with my favorite audio gear at 3:00 am when everything is clicking just as it should. These evanescent moments of such a perfect storm just can't be accurately captured and described using simple instrumental measurements. I've come to realize and accept this fact because I am an audio *enthusiast*.



Let me give a quick example. The other day, I was getting a bit bored with some listening I was doing. It was one of those days we all experience, when I just wasn't getting the sound out of my amp/speaker combination that I thought I should have. The system sounded constipated, as if the speakers just weren't doing a good enough job of "letting go" of the notes. I was getting pissed, and I'd had enough. So what did I do? I decided to set up a totally different amp/speaker combination, one that I'd had around for awhile but had never thought to try out together. Sitting downstairs in the corner of my living room was a pair of speakers I've had for a few years now, but I never recall having set up. I got them at a moving sale for I think ten bucks: a set of early Pioneers, perhaps from around 1960 or so, with a single full-range driver per side. They are labeled on the back as 16-ohm speakers, so I'd held on to them in case I ever got interested in fiddling around with low-powered vacuum tube amps. And then I remembered that I had such an amp on hand: the Linear Tube Audio MicroZOTL 2.0, which puts out a measly single watt of push-pull tube goodness for those brave or crazy enough to try it. Maybe it was time to try out the ancient Pioneers with the LTA amp.

And so I did. At first the sound was pretty miserable, as the cloth surrounds on the drivers had stiffened over time. However, after a few hours, things started to loosen up and come into their own, and it only got better from there. Okay, there was no deep bass, the lower treble was kind of peaky (there was no real high treble), and the little system was never going to play terribly loud. But my goodness, there was no constipation! The notes were literally jumping from the old paper cones as if my (audio) system had just had the enema of enemas. And the midrange, that glorious midrange. I'd never heard acoustic guitar and female vocals sound so crystal clear, yet immediate, as if in the room with me. I laughed to myself, as I just knew this amp/speaker combination must totally suck by the measurements alone. A true abomination by modern standards, with more total harmonic distortion than a set of ears should stand, yet here I was reveling in the beauty of what I was hearing. And so it goes, the life of an audio *enthusiast*.... Nothing makes logical sense any more.



The Pass Labs INT-60: an Amplifier for the Audio Enthusiast

I bring all of the aforementioned stuff up because I firmly believe that the Pass Labs INT-60 will appeal tremendously to the true audio enthusiast. Others may like it as well, especially if your goal is to impress your friends and business associates. Imagine showing that baby off to your boss over highballs and Cuban cigars; you'll get a promotion in no time, as your badass-ness should be obvious to all.

The first thing you notice, besides how beautiful the amp is, is its build quality. It's heavy, fit-n-finish are exquisite, and it's stuffed full of electronic gadgetry. Just looking through the ventilation slits on the top panel tells me that the main amplification circuits are regulated and protected, fail safe after fail safe. This is the kind of gear you could put on a flight to Mars and trust with your life. If it's anything like its forebears from Nelson Pass' previous company, Threshold Audio, then color me impressed.



I had a Threshold amp once, and I loved it, but one day I did something stupid (only once?). I was at the tail end of a serious listening session, and a severe thunderstorm was rapidly approaching. I was dead set on finishing my session, and just then the house took a direct lightning strike. I swear I saw smoke and flames coming from the naked drivers on my speakers. In fact, the drivers were totally blown and deformed, and the lower parts had actually melted to the magnets. It was a total mess, and I assumed that the Threshold amp that had been driving the speakers was fried as well, as it had been plugged directly into a wall outlet. I sent the amp out for service, and was later told that there was absolutely nothing wrong with it! It measured as well as it had on the day it was manufactured. Even though the Pass Labs products are a more modern design I think there is a whole lot of Threshold DNA in these amps, and that's a good thing. Nelson Pass himself leads a team of engineers for these latest releases.



As its name suggests, the INT-60 puts out 60 watts per channel into eight ohm loads, doubling down into four ohms. The first 30 watts are pure class A, shifting into class AB beyond that. The shift isn't audible, but can be tracked using the beau-ti-ful blue meter on the front of the amp. If the backlit needle starts to dance, then the amp is at least considering leaving

class A operation. With the modest demands I put on the INT-60, the little needle rarely ever budged, much less danced, so I can pretty conclusively say I was listening exclusively in sweet, sweet class A. Multiple inputs are offered, both single-ended and balanced; I chose to use balanced directly from my Antelope Audio DAC. In short, the device offers pretty much all of the conveniences one would expect from a modern top-of-the-line integrated amp, including a very nicely crafted and easy to use remote control (thank you, Pass Labs). As with previous Pass Labs gear I've had in my home, the INT-60 runs to the warm side of hot. Not quite as hot as the little First Watt F7 I have here, but quite warm none-the-less. I can tell by using the scientifically proven "cat test": the cat of the house won't lie on the First Watt, as it's too hot, but she loves the INT-60, as it's just oh-so-right on her little bum. Given the size and temperature of the INT-60, I could just imagine Barbie-doll and her friends basking around its thermionic goodness:



Malibu Barbie: "Hey Ken, let's go hang out down by the Pass and catch some rays!"

Generic Ken: "Sure hon, I'll see you there at six; I'll bring champagne."

Unfortunately, Malibu Barbie and her friends have not made an appearance at my home for a few years now, ever since my daughter dismembered her when she was four. For some reason, my kid was far more interested in Barbie's yellow VW bug with the hippie flower paint job than she was in Barbie.

As to sonic footprint, the Pass Labs INT-60 sounds pretty much as it looks: elegant, decisive, and in control. I bet you thought I was going to say "hot and heavy," right? In all seriousness, this is an amp that ticks lots of audiophile boxes, ranging from vise-like bass control, to a slightly lush yet highly detailed midrange, to a velvety sweet treble. With the right speakers, it can cast an amazingly convincing three-dimensional soundstage while locking down individual instruments within that spatial hologram.



And that's the key: with the right speakers. I had assumed that an amp like this would be beastly enough in its character to override the quirks of any speakers I paired it with, and that's just not so. I spent the first few weeks with the INT-60 in-house using it to drive my reference ATC SCM19 (version 2) monitors. Sure, most users report that these power-hungry speakers need at least 100 watts per side to come alive, but I've driven them quite convincingly with the little 20 watt per channel First Watt F7. Should be a cinch for the monster INT-60, right? Well, not so much. The pairing wasn't particularly bad, but the ATCs just weren't singing like I've heard them sing before. It's as if Malibu Barbie were trailering her 30 foot cigarette boat (she's a doctor...) down to La Jolla with her tricked out Hippie VW Bug rather than with a Ford F150. In short, the speakers sounded a tad lazy and constipated (see above...), and some of the fleshed out technicolor midrange I normally enjoy from them seemed somewhat grayed out. I seem to recall the SCM19s sounding much more alive with the big Pass Labs X-250.8 stereo amp I reviewed a few years ago, so maybe power is something of an issue here.

Time to move on to another speaker, then; this time it was the Fritz Speakers Carbon 7 Special Edition. Here, the union between amp and speaker seemed far more propitious, so that's the

setup I used for most of my subsequent critical listening. Someone needs to tell my lifetime soulmate that there is actually a valid reason why I keep multiple pairs of speakers (and amplifiers...) around the house.

Into the PASSing Lane

Now that I was convinced that I was hearing what the INT-60 was really capable of, I was ready to get down to some good old fashioned nit-picky reviewing.



Let's begin with some fun music from my favorite sequined Saturnian, Sun Ra. Playing now is a great album of his from 1986, *Reflections in Blue* (LP, digitally archived). It's a wild and raucous ride which includes Ra's interpretations of several show tunes and jazz standards, as well as one or two of his original compositions. While not taken seriously by some due to his unconventional beliefs about his cosmic origin and interplanetary comings and goings, Sun Ra was without a doubt a formidable jazz musician and composer. From his early days as a straight-ahead pianist to his excursions into bop, free jazz, acid jazz, and even soulful funk, Ra was a master. He was a very early adopter of the electric keyboard, and he used it with ascerbic urgency at certain times and with playful delight at others. The works found on this album are definitely more of the "playful" and upbeat variety.

Played through the Fritz Carbon 7 SEs powered by the Pass Labs INT-60, every single tune is a feast for the ears. Take, for instance, the Jerome Kern standard "Yesterdays," which starts out with Ra's electronic keyboard tossing notes into space, creating a whirlwind of activity in the audible soundstage. Each note reminds me of a tiny burst of fireworks on a hot July night. Just then, Ra's Arkestra chimes in with its own raucous entrance, swinging away almost like a drunken New Orleans jazz band. We've got wailing saxes, electric guitar, and biting brass, all weaving in, out, and around Ra's keyboard. This is a complex smorgasbord indeed, but the INT-60 does a fantastic job of keeping it all from coming apart at the seams. I'm especially taken with the instrumental timbres, from the electronic "twang" of the keyboard to the metallic bite of the trumpet and trombone. The recording itself is quite excellent in that it does a good job of capturing these tonalities to the extent that the playback system is capable of reproducing them, and reproduce them this one does!



Moving on to a bit more mellow fare, I fired up my recording of guitar virtuoso Larry Coryell's pyrotechnics on the somewhat obscure album *Difference* (LP, Egg, digitally archived). Larry is another jazz great we lost in recent months, so I thought spinning this album would be an appropriate tribute. It's a lot of fun, as it has Coryell doing acoustic solo work, as well as playing electric in a nice, tight, jazz fusion ensemble. Again, the INT-60/Fritz amp/speaker combination does plenty of justice to this recording. Coryell's acoustic guitar has just that sound that draws me in and keeps my attention; I can hear plenty of attack and reverberation off the wood surface of the guitar, with essentially no smearing of the notes like one would hear on a less resolving setup. At the start of the tune "Picean Moon," Larry counts out the rhythm before his entrance, and I found his voice to sound especially lifelike. I

almost had to look up and see if someone was in the room with me. This cut is also a great example of a well-recorded modern jazz ensemble in that I could easily distinguish the individual instrumental lines, yet they sounded properly integrated as they would had I been listening live in a real performance venue. There's some pretty complex stuff going on here, but listening to it didn't tire me out or muddle my mind like such music, when poorly reproduced, sometimes can. The INT-60 also did a fine job of presenting a realistic sense of spaciousness on this recording. For instance, on the acoustic piece "Serabond," the audience can be heard projected toward the back of the soundstage, well behind Coryell, though the overall sense of space is still quite intimate, as if this were recorded in a relatively small jazz club.



Since I'm on a bit of a jazz fusion kick at the moment, some of Phil Collins' experimental band Brand X was next up. Perhaps my favorite Brand X record as of late has been the live album *Livestock* (LP, Passport, digitally archived). If I had any concern, it would be that the INT-60 powering the Fritz Carbon 7 SE speakers might sound a bit too "polite." This music is meant to scream and wail, and that's the fun of it. I won't say that there wasn't a bit of a warm glow cast over the music, but by no means was this effect detrimental; I'd go so far as to say that it enhanced the listening experience. Guitar and percussion sounded great, and as always, I relished listening to bassist Percy Jones' well laid-down riffs. I felt

that the INT-60 let me follow the bass lines with ease as the bass definition and extension were superbly rendered. The INT-60 is a highly resolving amplifier that does its job without ever "lecturing" the listener in a whiny or aggressive way.

Let's Get Crazy Now....

One thing that's fun about being an audio reviewer is that I keep a wide range of gear lying around so that I can try out some interesting, but perhaps unconventional pairings. An interest of mine is vintage speakers, as I think it's beneficial to see where we have been in order to better understand and appreciate where we are now and where we are headed in our technological future. I have two pairs of vintage speakers here that are something of "landmark" designs that have led to more modern incarnations still made today. The first of these is the famous Spondor BC1, which is the granddaddy of most of the larger BBC derived designs offered today by such companies as Spondor, Harbeth, and Stirling. Often said to be preferred by the "pipe and slippers" crowd, I find them to be convincing performers, even up against some tough modern competition. If you are fortunate, you might be able to find a pair in good nick (as the Brits like to say) for \$500 or less, as I managed to do on Craigslist. My more recent acquisition, taken as a trade from a buddy of mine, is a pair of JBL L112s, which is the follow-up to the famed L100, a speaker which defined the rockin' 1970s West Coast sound. I had a pair of L100s for a while, but I found that I much prefer the more even and musical reproduction of the slightly later L112s. Interestingly, a serial number search shows that both my Spondors and JBLs were produced at about the same time, in the early 1980s. If you get lucky, you should be able to score a nice pair of L112s for around \$500. I think both of these designs are well built and sound great, if somewhat different from one another, and are a lot of fun to play with.

I figured at 60 watts per channel, the INT-60 should do a nice job driving both of these speaker designs. Not that I'd expect the typical enthusiast to pair \$500 vintage speakers with \$9000 worth of amplification, but what the hey?

On deck first were the Spendor BC1s, sitting proudly on their stock metal stands. Compared to the Fritz Carbon 7s, the BC1s seemed less dynamic, less transparent, and a tad slower, especially in the lower registers. They did, however, excel in their ability to get instrumental and vocal tone right, which I suppose would be considered their strong point. For example, Sun Ra's electric keyboard seemed very realistic sounding, but its notes didn't jump out of the soundstage at me like they did with the Fritz speakers in place. Everything just sounded a bit more laid back and reticent. However, after letting my ears adjust for a few hours, it became evident to me that the INT-60 was bringing out that unique and beguilingly sweet midrange tone that the BC1s are known for, and that's worth quite a lot. Further, the somewhat wayward bass that these speakers are rightfully criticized for was comfortably mitigated by the vise-like control offered by the Pass Labs amp, rivaling the presentation I was getting from the better regulated Carbon 7s. Likewise, the INT-60/Spendor combination provided an exceptionally cohesive (from a tonal standpoint) playback of Larry Corydell's ensemble work, adding a bit more "meatiness" to the overall mix. That same enhancement of midrange body also lent a satisfying woody tone to the guitar on Corydell's exceptionally lovely solo acoustic pieces. In summary, the INT-60 made my BC1s sound a lot more expensive and refined than \$500 would suggest. As an afterthought, I listened to Miles Davis' album *Someday My Prince Will Come* (LP, Columbia, digitally archived). I'll just say that it was sublime.



Contrasting the midrange fullness of the Spendor BC1 is the JBL L112. This speaker tends toward a leaner, more bare bones midrange, opting to provide greater power and emphasis at the frequency extremes. Even so, I still find the JBL to be a good all-rounder for listening to different types of music, though it gets a definite tip of the hat for jazz fusion and rock. When firing up the Led Zep at high volume, it's my go to speaker! With the INT-60 running the show, the L112s were big, bold, and in-your-face, but not in an overwhelmingly aggressive way. What I heard was a sense of life, or "jump factor," as I like to describe it. The overall presentation was quite even-handed across the

audible spectrum, more-so than I expected it to be. Bass was full, punchy, and involving, while the mids were acceptably lifelike and engaging, though not quite as silky smooth and fleshy as through the Spondors. Highs had a nice, somewhat forward crystalline presence without becoming overbearing. I should note that these speakers have built-in frequency controls for both bass and treble, and I kept these at the neutral positions for both frequency extremes. Larry Corydell's acoustic guitar was pleasantly reproduced, but with a little less finesse and body than either the Fritz or Spondor speakers were able to muster, and his voice didn't have quite the lifelike presence it had before. Even so, the end result was better than I had expected.



When the music got a little louder and more up-tempo, that's when the JBL speakers had the opportunity to come into their own. Brand X? Yeah, now that's what we're talking about! Cranked up a wee bit (ha, ha), the sound was just plain fun. Forget finesse, Percy Jones' electric bass

took on a powerful life of its own, leaping out of the soundstage and propelling the rhythm forward like nobody's business. Also, when driven by the INT-60, I was quite pleased with the wide soundstage that these big JBLs could throw. Rimshots and cymbals extended out nicely beyond the speaker cabinets themselves, adding a nice sense of lifelike dimension. And the speakers certainly seemed to appreciate the power and control offered by the Pass Labs amp, as I kept wanting to turn up the volume. As I did so, I heard no sense of strain or compression whatsoever. With the INT-60 at the helm, these L112s can wail with the best.

Perhaps yet another crazy pairing price-wise, but the result was unabashed, unhindered fun.

End Game

OK, there's not much more I can say about this honey of an integrated amplifier. It's lovingly made by one of the best companies out there (in the USA to boot...), and it's everything I could expect from a no holds barred design. Outside of its somewhat unexpected inability to drive my ATC SCM 19 speakers to their stellar limits, I couldn't trip it up. In short, the Pass Labs INT-60 met or exceeded all of my expectations.

I think that this is a product that will ultimately tick most of the boxes for even the most discriminating audio enthusiast. Distilling it all down, it's an amplifier that makes me happy because it gets me more involved and closer to the musical experience. No piece of audio gear is perfect, nor will it fully satisfy every nutcase, um, I mean *enthusiast*, out there. But this amp, I suspect, will fit the bill better than most.

I fear that Malibu Barbie, Ken, and the cat will all be sad to see it go. So will I.